

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/667,707	09/22/2003	Hubert Moriceau	BREV 12940 CON	BREV 12940 CON 9247 EXAMINER	
27667	7590 10/11/2005		EXAM		
HAYES, SOLOWAY P.C. 3450 E. SUNRISE DRIVE, SUITE 140			AHMED, SHAMIM		
TUCSON, A	•		ART UNIT	PAPER NUMBER	
,			1765		
			DATE MAILED, 10/11/2004	•	

Please find below and/or attached an Office communication concerning this application or proceeding.

09360522

	Application No.	Applicant(s)				
Office Action Commence	10/667,707	MORICEAU ET AL.				
Office Action Summary	Examiner	Art Unit				
	Shamim Ahmed	1765				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
 Responsive to communication(s) filed on <u>22 September 2003</u>. This action is FINAL. 2b) ☐ This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213. 						
Disposition of Claims						
4) Claim(s) 30-59 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) □ Claim(s) 30-59 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) □ The drawing(s) filed on 22 September 2003 is/are: a) □ accepted or b) □ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 09/380,322. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4) Interview Summary (PTO-413) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) Other:						

U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05) Application/Control Number: 10/667,707 Page 2

Art Unit: 1765

DETAILED ACTION

Specification

- 1. The disclosure is objected to because of the following informalities: At the beginning of the specification, the continuing data needs to be updated such as the US application serial No 09/380,322, filed August 30,1999 is now US patent 6,756,286, which is 371 of PCT/FR98/02904, filed December 29,1998.
- 2. It is also noted that in several places in the specification (e.g., page 2, lines 12, page 3, line 15 and 17), the use of word "divulges" is not an English word. Applicants are requested to correct the entire specification, where necessary for the word with an English version.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

Application/Control Number: 10/667,707

Art Unit: 1765

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 30-40,42-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruel (5,374,564).

Bruel teaches a process for producing thin film of semiconductor material, wherein the process including the steps of forming a buried region of micro bubbles (3) on a substrate by a first stage of ion implantation for defining a lower region of the mass of the substrate and an upper region (5) constituting the thin film and heat treating the ion implanted substrate in order to separate the thin film region and the mass of the substrate (6) along a cleavage line (see the abstract).

Bruel fail to explicitly teach that forming an inclusion area for trapping gaseous compounds.

However, the first stage of the ion bombardment in the silicon substrate would obviously change the crystal orientation of the implanted region by disturbing the crystal consistency, so the implanted region is deemed to become a trap for gaseous compounds.

Furthermore, In general, the transposition of process steps or the splitting of one step into two, where the processes are substantially identical or equivalent in terms of function, manner and result, was held to be not patentably distinguish the processes. *Ex parte Rubin* 128 USPQ 440 (PTO BdPatApp 1959).

Art Unit: 1765

6. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bruel (5,374,564) and further in view of Deines et al (4,028,149).

Bruel discusses above in the paragraph 5 but fail to teach the inclusion area is formed by etching the substrate.

However, Deines et al teaches forming a buried porous silicon substrate by conventional masking an etching process (col.3, lines 19-40).

Therefore, it would have been obvious to one of ordinary skilled in the art at the time of claimed invention to combine Deines et al teaching into Bruel's process for efficiently forming porous or inclusion area in a substrate selectively or at desired area depending on the type of device to be formed as taught by Deines et al.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 30-40,47-59 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 6,756,286. Although the conflicting claims are not identical, they are not

Application/Control Number: 10/667,707 Page 5

Art Unit: 1765

patentably distinct from each other because the invention of the patent '286 broadly encompasses the instant invention.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Xiang-Zheng et al (5,242,863) disclose a process of forming a buried porous region in a silicon substrate; Yamagata et al (5,405,802) teaches conventional process of fabricating semiconductor device by forming porous silicon substrate and heating and selectively etching porous region.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shamim Ahmed whose telephone number is (571) 272-1457. The examiner can normally be reached on M-Thu (7:00-5:30) Every Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine G. Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1765

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shamim Ahmed Primary Examiner Art Unit 1765

SA September 28, 2005